

Atty. Dkt. No. 02CR377/KE

Amendments to the Specification:

Please amend the specification as follows:

Please replace paragraph [0018] on page 7 with the following rewritten paragraph:

[0018] With reference to FIGURE 1, a GPS receiver 20 includes a GPS receiver analog front end 22, a digital anti-jamming processing circuit 24, and a ~~pseudo-range-generator~~ positioning receiver 26. Preferably system 20 is configured for use in a global positioning system (GPS) and is described as such below. However, system 20 can be configured to operate in any type of positioning system including a GLONASS system, a pseudolite system, or other positioning system without departing from the present invention.

Please replace paragraph [0021] on page 8 with the following rewritten paragraph:

[0021] In one embodiment, conductor 24 42 provides digital data in parallel to positioning receiver 26 and conductor 44 provides serial data to positioning receiver 26. Conductor 42 can be a highway of digital data. Alternatively, other data formats are possible for communicating data between circuit 24 and receiver 26.

Please replace paragraph [0029] on page 10 with the following rewritten paragraph:

[0029] In one embodiment ionospheric corrections circuit 48 adjust the raw PR values in accordance with delay error 1 and delay error 2 to achieve L1 and L2 values corrected for digital anti-jamming processing. These corrected L1 and L2 values are used to make ionospheric corrections according to the equation given in the background of the invention. In another embodiment, the calculation for ionospheric corrections can be adjusted in accordance with the delay errors provided at outputs 52 and 54. In either embodiment, ionospheric corrections circuit 48 provides corrected L1 and L2 values in response to delays or distortions associated with digital anti-jamming processing circuit 24. Ionospheric corrections circuit 48 can be implemented in software executed on a digital signal processor, on an ASIC, or other hardware.

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Alternatively, ionospheric corrections 48 can be implemented in a hardware circuit without the use of software.

Please replace paragraph [0031] on page 11 with the following rewritten paragraph:

[0031] Distortion calculator 30 determines the distortion provided by anti-jamming processing circuit 24 in the form of a delay. ~~Calculator 44~~ Distortion calculator 30 provides a message, preferably a serial message, indicating the delay error at a particular time. The delay error is measured by calculating the effective anti-jam filter response in the direction of the desired satellite. The group delay of this filter manifests itself as pseudorange error, so by calculating the group delay, one is able to determine the corrections to pseudorange error that are utilized in the iono corrections.

Please replace paragraph [0032] on page 11 with the following rewritten paragraph:

[0032] With reference to FIGURE 2, digital anti-jamming processing circuit 24 is configured including ~~and an~~ ASIC 82 and distortion calculator 30 implemented in a DSP 80. Digital anti-jamming processing circuit 24 receives signals at inputs 78 and provides them through weight application circuit 84 in ASIC 82. Weight application circuit 84 preferably receives weight values from DSP 80 in accordance with a digital anti-jamming processing algorithm. The weight values are provided at an input 88 to weight application circuit 84. Weight application circuit 84 compensates for jamming energy to provide signals to GPS engine 34 (FIGURE 1).